PMRT

Supporting high quality local perinatal reviews

National Perinatal Mortality Review Tool

Learning from Standardised Reviews When Babies Die

National Perinatal Mortality Review Tool

Fourth Annual Report - Tables of Findings

September 2022

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1. Conducting Reviews

Table 1.1: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, England 2018 to 2022 (as at 27th June 2022)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2018			
Review at least started	2,256 (85%)	1,094 (80%)	3,350 (83%)
Review published*	2,069 (78%)	889 (65%)	2,958 (74%)
2019			
Review at least started	2,458 (98%)	1,330 (99%)	788 (99%)
Review published*	2,293 (92%)	1,128 (90%)	3,421 (91%)
2020			
Review at least started	2,277 (91%)	1,273 (96%)	3,550 (98%)
Review published*	2,163 (95%)	1,086 (82%)	3,249 (90%)
2021			
Review at least started**	2,459 (99%)	1,391 (99%)	3,850 (99%)
Review published**	2,185 (88%)	1,024 (73%)	3,209 (83%)
2022			
Review at least started**	914 (90%)	636 (96%)	1,550 (92%)
Review published**	278 (27%)	158 (24%)	436 (26%)

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 27th June 2022; some deaths in 2022 may not have been notified and many of these reviews will still be in progress at this stage of reporting

Table 1.2: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, Scotland 2018 to 2022 (as at 27th June 2022)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2018			
Review at least started	93 (45%)	35 (38%)	128 (43%)
Review published*	59 (29%)	27 (29%)	861 (29%)
2019			
Review at least started	160 (82%)	65 (75%)	225 (80%)
Review published*	127 (65%)	53 (61%)	225 (80%)
2020			
Review at least started	162 (81%)	51 (56%)	213 (73%)
Review published*	150 (75%)	44 (48%)	194 (67%)
2021			
Review at least started**	163 (88%)	76 (62%)	239 (78%)
Review published**	148 (80%)	49 (40%)	197 (64%)
2022			
Review at least started**	49 (83%)	27 (61%)	76 (74%)
Review published**	22 (37%)	10 (23%)	32 (31%)

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 27th June 2022; some deaths in 2022 may not have been notified and many of these reviews will still be in progress at this stage of reporting

Table 1.3: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, Wales 2018 to 2022 (as at 27th June 2022)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2018			
Review at least started	92 (72%)	47 (78%)	139 (74%)
Review published*	75 (59%)	24 (40%)	99 (53%)
2019			
Review at least started	93 (73%)	73 (99%)	166 (82%)
Review published*	67 (52%)	43 (58%)	110 (54%)
2020			
Review at least started	97 (89%)	65 (100%)	162 (87%)
Review published*	89 (82%)	30 (51%)	119 (71%)
2021			
Review at least started**	97 (80%)	55 (100%)	152 (87%)
Review published**	58 (48%)	6 (11%)	64 (37%)
2022			
Review at least started**	37 (69%)	11 (55%)	48 (65%)
Review published**	2 (4%)	0	0

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 27th June 2022; some deaths in 2022 may not have been notified and many of these reviews will still be in progress at this stage of reporting

Table 1.4: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, Northern Ireland 2020 to 2022 (as at 27th June 2022)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2020¥			
Review at least started	73 (84%)	23 (35%)	96 (63%)
Review published*	43 (49%)	11 (17%)	54 (35%)
2021			
Review at least started**	81 (77%)	20 (30%)	101 (59%)
Review published**	23 (22%)	3 (4%)	26 (15%)
2022			
Review at least started**	23 (56%)	5 (23%)	28 (44%)
Review published**	0	0	0

¥ Trusts in Northern Ireland adopted the PMRT for the conduct of reviews during autumn 2019. As a conse¬quence the reviews carried out in Northern Ireland in 2019 and 2020 were during the implementation phase of the use of the PMRT and few reviews were completed or published in 2019. This table therefore only includes information about reviews carried out from January 2020

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 27th June 2022; some deaths in 2022 may not have been notified and many of these reviews will still be in progress at this stage of reporting

Table 1.5: Characteristics of the reviews by country, size of unit, and type of death for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022	
	Number of reviews N = 1,500	Percentage of reviews	Number of reviews N = 3,693	Percentage of reviews	Number of reviews N = 3,981	Percentage of reviews	Number of reviews N = 4,199	Percentage of reviews
Country:								
England	1,416	94%	3,642	94%	3,621	91%	*3,746*	*89%*
Wales	23	2%	81	2%	146	4%	*171*	*4%*
Scotland	61	4%	150	4%	176	4%	*235*	*6%*
Northern Ireland*	--	--	--	--	38	1%	*47*	*1%*
Type of death:								
Late miscarriages	143	10%	449	12%	385	10%	416	10%
Stillbirths	1,011	67%	2,158	58%	2,215	56%	2,394	57%
Neonatal deaths	346	23%	1,086	29%	1,381	35%	1,389	33%

*Northern Ireland adopted the tool in autumn 2019

Table 1.6: Number and percentage of staff recorded as present at the review session with the largest number of participants by type of death, comparing the four time periods from Jan 2018 to Feb 2022

Number of staff recorded as present	Reviews Jan 2018 to Feb 2019			Reviews Mar 2019 to Feb 2020			Reviews Mar 2020 to Feb 2021			Reviews Mar 2021 to Feb 2022		
	Late miscarriages & stillbirths (N = 2,607 n (%)	Neonatal deaths (N = 346) n (%)	All deaths (N = 1,500) n (%)	Late miscarriages & stillbirths (N = 2,607 n (%)	Neonatal deaths (N = 1,086) n (%)	All deaths (N = 3,693) n (%)	Late miscarriages & stillbirths (N = 2,600) n (%)	Neonatal deaths (N = 1,381) n (%)	All deaths (N = 3,981) n (%)	Late miscarriages & stillbirths (N = 2,810) n (%)	Neonatal deaths (N = 1,389) n (%)	All deaths (N = 4,199) n (%)
1	94 (8%)	23 (7%)	117 (8%)	224 (9%)	89 (8%)	313 (8%)	160 (6%)	110 (8%)	270 (7%)	164 (6%)	96 (7%)	260 (6%)
2-3	316 (27%)	87 (25%)	403 (27%)	605 (23%)	188 (17%)	793 (21%)	405 (16%)	161 (11%)	566 (14%)	250 (9%)	101 (8%)	351 (9%)
4-7	447 (41%)	129 (37%)	606 (40%)	1,031 (40%)	434 (40%)	1,465 (40%)	1,089 (42%)	448 (32%)	1,537 (39%)	976 (35%)	326 (23%)	1,302 (30%)
8+	265 (23%)	107 (31%)	372 (25%)	601 (22%)	323 (30%)	924 (25%)	874 (34%)	627 (45%)	1,501 (38%)	1,358 (48%)	832 (60%)	2,190 (52%)
None recorded	2			147 (6%)	52 (5%)	52 (5%)	72 (3%)	35 (3%)	107 (3%)	62 (2%)	34 (2%)	96 (2%)
Median	5	6	5	4	5	5	6	7	6	7	9	8

Table 1.7: Number and percentage of reviews involving each type of professional, comparing the four time periods from Jan 2018 to Feb 2022

Professional role	Number of reviews in any review session (% of reviews) Reviews Jan 2018 to Feb 2019			Number of reviews in any review session (% of reviews) Reviews Mar 2019 to Feb 2020			Number of reviews in any review session (% of reviews) Reviews Mar 2020 to Feb 2021			Number of reviews in any review session (% of reviews) Reviews Mar 2021 to Feb 2022		
	Late miscarriages & stillbirths (N = 1,154) n (%)	Neonatal deaths (N = 346) n (%)	All deaths (N = 1,500) n (%)	Late miscarriages & stillbirths (N = 2,607) n (%)	Neonatal deaths (N = 1,086) n (%)	All deaths (N = 3,693) n (%)	Late miscarriages & stillbirths (N = 2,600) n (%)	Neonatal deaths (N = 1,381) n (%)	All deaths (N = 3,981) n (%)	Late miscarriages & stillbirths (N = 2,810) n (%)	Neonatal deaths (N = 1,389) n (%)	All deaths (N = 4,199) n (%)
External panel member	105 (9%)	29 (8%)	134 (9%)	496 (19%)	206 (19%)	702 (19%)	539 (21%)	304 (22%)	843 (21%)	938 (33%)	478 (34%)	1,416 (34%)
Midwife	972 (84%)	267 (77%)	1,239 (83%)	2,174 (83%)	826 (76%)	3,009 (81%)	2,295 (88%)	1,128 (82%)	3,435 (86%)	2,658 (95%)	1,198 (86%)	3,856 (92%)
Neonatologist/ paediatrician	140 (12%)	204 (59%)	344 (23%)	468 (18%)	766 (71%)	1,234 (33%)	592 (23%)	1,112 (81%)	1,704 (43%)	795 (28%)	1,148 (83%)	1,943 (46%)
Obstetrician	893 (77%)	253 (73%)	1,146 (76%)	2,050 (79%)	778 (72%)	2,833 (76%)	2,269 (87%)	1,024 (74%)	3,292 (83%)	2,540 (90%)	1,153 (83%)	3,693 (88%)
Bereavement team member	495 (43%)	145 (42%)	640 (43%)	1,444 (55%)	526 (48%)	1,977 (54%)	1,353 (52%)	703 (51%)	2,056 (52%)	1,602 (57%)	828 (60%)	2,430 (58%)
Risk manager/ governance team member	749 (65%)	206 (60%)	955 (64%)	2,452 (94%)	918 (85%)	3,381 (92%)	1,889 (73%)	920 (67%)	2,089 (71%)	2,060 (73%)	1,003 (72%)	3,063 (73%)
PMRT/maternity safety champion*	125 (11%)	24 (7%)	149 (10%)	454 (18%)	139 (14%)	593 (17%)	410 (18%)	269 (21%)	670 (19%)	581 (24%)	300 (23%)	881 (24%)
Neonatal nurse	56 (5%)	83 (24%)	139 (9%)	226 (9%)	779 (71%)	1,005 (27%)	209 (8%)	632 (46%)	840 (21%)	376 (13%)	740 (53%)	1,116 (27%)
Service manager/ member of management team	288 (25%)	65 (19%)	353 (24%)	1,130 (43%)	366 (34%)	1,499 (40%)	967 (37%)	404 (29%)	1,371 (34%)	1,214 (43%)	505 (36%)	1,719 (41%)
Administrative support staff	122 (11%)	48 (14%)	170 (11%)	448 (17%)	230 (21%)	680 (18%)	545 (21%)	320 (23%)	865 (22%)	760 (27%)	502 (36%)	1,262 (30%)
Pathologist	26 (2%)	4 (1%)	30 (2%)	120 (5%)	16 (1%)	136 (4%)	152 (6%)	47 (3%)	199 (5%)	228 (8%)	94 (7%)	322 (8%)
Anaesthetist	39 (3%)	4 (1%)	43 (3%)	52 (2%)	19 (2%)	71 (2%)	49 (2%)	33 (3%)	84 (2%)	89 (3%)	57 (4%)	146 (3%)
Other	223 (19%)	67 (19%)	290 (19%)	764 (29%)	558 (51%)	1,323 (36%)	623 (24%)	466 (34%)	1,089 (27%)	803 (29%)	564 (41%)	1,376 (33%)
Unknown (in addition to other)	938 (81%)	297 (86%)	1,235 (82%)	406 (16%)	252 (23%)	658 (18%)	357 (14%)	305 (22%)	662 (17%)	555 (20%)	415 (30%)	970 (23%)

*Maternity safety champions are only relevant in England and thus the proportions are calculated on the basis of the 3,746 reviews conducted in England

Table 2.1: Number and percentage of reviews indicating parents' perspectives of care were sought and comments recorded comparing the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019				Reviews Mar 2019 to Feb 2020				Reviews Mar 2020 to Feb 2021				Reviews Mar 2021 to Feb 2022			
	Reviews where parents' perspectives were indicated as having been sought		Reviews with parents' comments recorded**		Reviews where parents' perspectives were indicated as having been sought		Reviews with parents' comments recorded**		Reviews where parents' perspectives were indicated as having been sought		Reviews with parents' comments recorded**		Reviews where parents' perspectives were indicated as having been sought		Reviews with parents' comments recorded**	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Country:																
England	1,070	76%	1,037	73%	2,916	84%	2,899	84%	3,277	90%	3,244	90%	3,620	97%	3109	83%
Wales	19	82%	18	78%	70	86%	70	86%	98	67%	98	67%	140	82%	120	70%
Scotland	35	57%	34	56%	130	87%	130	87%	160	91%	160	91%	201	86%	163	69%
Northern Ireland*	--	--	--	--	--	--	--	--	34	89%	34	89%	44	94%	38	81%
Overall	1,124	75%	1,089	73%	3,116	84%	3,099	84%	3,569	90%	3,536	89%	4,005	95%	3,430	82%
Type of death:																
Late miscarriages	100	70%	98	69%	365	81%	365	81%	344	89%	344	89%	398	96%	332	81%
Stillbirths	781	77%	755	75%	1,879	87%	1,875	87%	2,041	92%	2,039	92%	2,309	96%	1,922	80%
Neonatal deaths	243	70%	236	68%	872	80%	859	79%	1,184	86%	1,153	83%	1,298	93%	1,176	85%

* Trusts in Northern Ireland adopted the PMRT for the conduct of reviews during autumn 2019. As a conse¬quence the reviews carried out in Northern Ireland in 2019 and 2020 were during the implementation phase of the use of the PMRT and few reviews were completed or published in 2019. This table therefore only includes information about reviews carried out from March 2020.

** A small number of the comments were not actually parental comments

Table 2.2: Themes from those parents who had questions or expressed concerns about their care comparing the three periods: Jan 2018 - Feb 2019, Mar 2019-Feb 2020 and Mar 2020 – Feb 2021

	Frequency of responses Jan 2018 to Feb 2019 N = 468 n (%)	Frequency of responses Mar 2019 to Feb 2020 N=225 n (%)	Frequency of responses* Mar 2020 to Feb 2021 N= 200** n (%)	Frequency of responses* Mar 2021 to Feb 2022 N= 200 (sample)** n (%)
Questions and/or concerns about management plans and the care received	208 (44%)	120 (53%)	108 (54%)	82 (41%)
Poor communication	25 (5%)	21 (9%)	32 (16%)	61 (30%)
Concerns about technical aspects of care e.g. scan quality and reporting	22 (5%)	9 (4%)	32 (16%)	51 (25%)
Did not feel listened to	21 (4%)	14 (6%)	18 (9%)	22 (11%)
Felt unsupported	8 (2%)	8 (4%)	8 (4%)	25 (12%)
Left alone in labour	4 (1%)	5 (2%)	4 (2%)	2 (1%)

* For <1% of reviews the section in the PMRT about parents questions and concerns was left blank; for 27% of reviews it was reported there were no concerns or questions raised by the parents; for 22% no questions or concerns had been received back by the time of the review; and for 3% the parents expressed a very positive view of the care they had received and had no questions or concerns.

** A total of 1,916 (46%) reviews had at least one question, concern or comment from parents about their care; a sample of 200 reviews were read and categorised into one of the six main themes identified in the previous reports.

Small number of trusts/health boards where for over half of reviews no questions or comments had been received from parents. Suggest there is something different about the way in which feedback from parents is sought

Table 2.3: Themes from those parents who had questions, comments or expressed concerns about their care by type of death Mar 2021 to Feb 2022

	Frequency of responses Late miscarriages and stillbirths N=135 (sample) n	Frequency of responses Late miscarriages and stillbirths N=135 (sample) (%)	Frequency of responses Neonatal death N=65 (sample) n	Frequency of responses Neonatal death N=65 (sample) (%)
Questions and/or concerns about management plans and the care received	54	40%	28	43%
Poor communication	46	34%	15	23%
Concerns about technical aspects of care e.g. scan quality and reporting	36	27%	15	23%
Did not feel listened to	15	11%	7	11%
Felt unsupported	17	13%	8	12%
Left alone in labour	1	<1%	1	2%

Table 3.1: Number and proportion of reviews with issues with care identified and the average number of issues identified per death reviewed, for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022	
	Number of reviews with at least one issue identified	Percentage of all reviews with at least one issue identified	Number of reviews with at least one issue identified	Percentage of all reviews with at least one issue identified	Number of reviews with at least one issue identified	Percentage of all reviews with at least one issue identified	Number of reviews with at least one issue identified	Percentage of all reviews with at least one issue identified
Country:								
England	1,334	94%	3,238	89%	3,456	95%	3,624	97%
Wales	23	100%	68	84%	144	99%	171	100%
Scotland	59	97%	131	87%	160	91%	230	98%
Northern Ireland*	--	--	--	--	37	97%	46	98%
Overall	1,416	94%	3,437	93%	3,797	95%	4,071	97%
Type of death:								
Late miscarriages	127	89%	399	88%	360	94%	386	93%
Stillbirths	940	93%	1,980	92%	2,465	96%	2,346	98%
Neonatal deaths	341	99%	1,058	97%	1,332	97%	1,339	96%

* Northern Ireland adopted the tool in autumn 2019

Table 3.2: The eight most common Issues with care identified in reviews of pre-conception and antenatal care, for the four time periods from Jan 2018 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022	
	Number and percentage of reviews with each issue N=1,500 n (%)	Number of issues relevant to the outcome N=883 n (%*)	Number and percentage of reviews with each issue N=3,693 n (%)	Number of issues relevant to the outcome N=1,871 n (%*)	Number and percentage of reviews with each issue N=3,981 n (%)	Number of issues relevant to the outcome N=1,650 n (%*)	Number and percentage of reviews with each issue N=4,199 n (%)	Number of issues relevant to the outcome N=1,789 n (%*)
Inadequate growth surveillance	384 (26%)	269 (30%)	712 (19%)	448 (24%)	748 (19%)	371 (23%)	1,029 (25%)	428 (24%)
Late booking/unbooked pregnancy	220 (15%)	65 (7%)	568 (15%)	201 (11%)	588 (15%)	139 (8%)	1,000 (24%)	160 (9%)
Smoking assessment and management of exposure to tobacco smoke	604 (40%)	113 (13%)	1,226 (33%)	196 (11%)	973 (24%)	129 (8%)	834 (20%)	62 (3%)
Delay in diagnosis or inappropriate management of significant medical/ surgical/social problems during pregnancy[3]	155 (10%)	106 (12%)	363 (10%)	343 (18%)	408 (10%)	334 (20%)	759 (18%)	440 (25%)
Inadequate investigation or management of reduced fetal movements[2]	230 (15%)	142 (16%)	456 (12%)	273 (15%)	462 (12%)	314 (19%)	702 (17%)	322 (18%)
Lack of appropriate referral for social issues1 or screening for domestic abuse at booking	196 (13%)	11 (1%)	808 (22%)	51 (3%)	636 (16%)	39 (2%)	407 (10%)	30 (2%)
Assessment and management of aspirin requirement	339 (23%)	66 (7%)	628 (17%)	128 (7%)	467 (12%)	101 (6%)	332 (8%)	70 (4%)
Screening for, or management of, gestational diabetes mellitus (GDM)	164 (11%)	17 (2%)	246 (7%)	38 (2%)	235 (6%)	30 (2%)	269 (6%)	43 (2%)

*This percentage is the proportion of all relevant issues identified including issues affecting a small proportion of reviews which are not listed in the table.

1. Includes: housing, benefits, social support, teenager, other vulnerabilities
2. Includes: no risk assessment; investigations indicated not carried out; poor quality, or incorrectly interpreted CTGs; lack of appropriate written information for mother
3. Includes: appropriate management according to local guidelines, but not national guidelines

Table 3.3: The eight most common issues with care identified during intrapartum care, for the four time periods from Jan 2018 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022	
	Number and percentage of reviews with each issue N=1,500 n (%)	Number of issues relevant to the outcome N=346 n (%*)	Number and percentage of reviews with each issue N=3,693 n (%)	Number of issues relevant to the outcome N=869 n (%*)	Number and percentage of reviews with each issue N=1,037 n (%)	Number of issues relevant to the outcome N=1,650 n (%*)	Number and percentage of reviews with each issue N=4,199 n (%)	Number of issues relevant to the outcome N=979 n (%*)
Issues with monitoring of the mother[1]	507 (34%)	52 (15%)	944 (26%)	114 (13%)	904 (23%)	115 (11%)	914 (22%)	92 (9%)
No assessment of mother's risk status or inadequate management at the start of her care in labour or during the course of her labour	118 (8%)	41 (12%)	198 (5%)	83 (10%)	221 (6%)	122 (12%)	281 (7%)	108 (11%)
Fetal monitoring issues[2]	53 (4%)	67 (19%)	162 (4%)	180 (21%)	162 (4%)	177 (17%)	311 (7%)	185 (19%)
Issues with communication with mothers with poor/no English	77 (5%)	13 (4%)	244 (7%)	45 (5%)	193 (5%)	22 (2%)	283 (7%)	23 (2%)
Staffing issues[3]	82 (5%)	40 (12%)	289 (5%)	132 (15%)	169 (4%)	136 (13%)	233 (6%)	121 (12%)
Inappropriate setting/location of birth	53 (4%)	24 (7%)	138 (4%)	50 (6%)	178 (5%)	84 (8%)	179 (4%)	97 (10%)
Issues in management of preterm and threatened preterm labour	27 (2%)	22 (6%)	73 (2%)	28 (3%)	93 (2%)	50 (5%)	166 (4%)	69 (7%)
Issues with birth mode(s)[4]	42 (3%)	19 (5%)	101 (3%)	68 (8%)	108 (3%)	81 (8%)	120 (3%)	79 (8%)

1. Includes: infrequent observations and lack of partogram
2. Includes: incorrect method of fetal monitoring, interpretation or management, from prior to established labour to the latent phase of labour
3. Includes: insufficiently senior staff involved in care and lack of one-to-one care in established labour
4. Includes: inappropriate choice, timing and management

Table 3.4: The most common issues with care identified during neonatal care (excluding end of life care), for the four time periods from Jan 2018 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022	
	Number and percentage of reviews with each issue N=346 n (%)	Number of issues relevant to outcome N=81 n (%)	Number and percentage of reviews with each issue N=1,086 n (%)	Number of issues relevant to outcome N=446 n (%)	Number and percentage of reviews with each issue N=1,381 n (%)	Number of issues relevant to outcome N=440 n (%)	Number and percentage of reviews with each issue N=1,389 n (%)	Number of issues relevant to outcome N=453 n (%)
Inadequate documentation overall	185 (53%)	32 (40%)	791 (73%)	125 (28%)	721 (52%)	154 (35%)	1,132 (81%)	73 (16%)
Resuscitation & stablisation	172 (50%)		525 (48%)		441 (32%)		609 (44%)	
Transfer to neonatal unit	25 (7%)		107 (10%)		92 (7%)		91 (7%)	
Neonatal care	35 (10%)		134 (12%)		162 (12%)		353 (25%)	
Transfer to an external neonatal	14 (4%)		25 (2%)		26 (2%)		79 (6%)	
Thermal management issues overall	61 (18%)	14 (17%)	272 (25%)	88 (20%)	345 (25%)	138 (31%)	376 (27%)	123 (27%)
Resuscitation	18 (5%)		24 (3%)		51 (4%)		48 (3%)	
Neonatal care	14 (4%)		64 (5%)		64 (5%)		78 (6%)	
Transfer to neonatal unit/other	50 (15%)		174 (16%)		230 (17%)		250 (18%)	
Issues during resuscitation with:								
Respiratory management[1]	56 (16%)	<10	183 (17%)	55 (13%)	218 (16%)	71 (16%)	209 (15%)	66 (15%)
Delayed cord clamping							61 (4%)	6 (1%)
Resuscitation not in line with NLS							49 (4%)	21 (5%)
Issues during neonatal care with:								
Cardiovascular management[2]	21 (6%)	<10	45 (4%)	43 (10%)	60 (4%)	10 (2%)	60 (4%)	6 (1%)
Respiratory management							69 (5%)	18 (4%)
Issues with communication with parents[3]	13 (4%)	<10	43 (4%)	56 (3%)	52 (4%)	11 (3%)	108 (8%)	11 (2%)

1. Includes: issues around establishing ventilation, intubation, positive pressure respiratory support, oxygen saturation monitoring and administration of surfactant
2. Includes: line placement and radiological confirmation of line position
3. Includes: mothers/parents with poor/no English and at any stage of resuscitation, transfer and neonatal care

Table 3.5: The most common issues with care identified during end of life care, for the four time periods from Jan 2018 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019 Number and percentage of reviews N=346 n (%)	Reviews Mar 2019 to Feb 2020 Number and percentage of reviews N=1,086 n (%)	Reviews Mar 2020 to Feb 2021 Number and percentage of reviews N=1,381 n (%)	Reviews Mar 2021 to Feb 2022 Number and percentage of reviews N=1,389 n (%)
Post-mortem not discussed with parents prior to the baby's death	52 (15%)	151 (14%)	217 (16%)	237 (17%)
Organ donation not discussed with parents despite no specific contraindications	82 (24%)	209 (19%)	225 (16%)	184 (13%)
Inadequate documentation	57 (16%)	180 (17%)	114 (8%)	117 (8%)

Table 3.6: The most common issues with care identified after the baby had died, for the four time periods from Jan 2018 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019 Number and percentage of reviews (N=1,500) n (%)	Reviews Mar 2019 to Feb 2020 Number and percentage of reviews N=3,693 n (%)	Reviews Mar 2020 to Feb 2021 Number and percentage of reviews N=3,981 n (%)	Reviews Mar 2021 to Feb 2022 Number and percentage of reviews N=4,199 n (%)
Baby had to be transferred elsewhere for a post-mortem	--*	546 (15%)	1,024 (26%)	1,081 (64%)**
Placental histology was performed but not by a perinatal/paediatric pathologist	177 (12%)	351 (10%)	287 (7%)	275 (7%)
The placenta was not sent for histological examination	38 (3%)	136 (4%)	132 (3%)	99 (2%)
The parents were not offered a hospital post-mortem	16 (1%)	63 (2%)	77 (2%)	41 (1%)
It is not possible to assess from the notes whether the parents were offered a hospital post-mortem	19 (1%)	39 (1%)	30 (1%)	46 (1%)
The placenta was sent for histological examination but there is no result in the notes	27 (2%)	52 (1%)	40 (1%)	34 (1%)
The parents consented to a full or limited post-mortem examination but this was not carried out	17 (1%)	7 (<1%)	4 (<1%)	9 (<1%)

*Not reported in 2018-19

** The proportion calculated for 2021-2022 was based on only those reviews where a post-mortem (full or limited) was carried out; this was a total of 1,689 reviews. Calculating the proportion as in previous years this was 26% suggesting little change from 2020-21.

Table 3.7: The most common issues identified with bereavement care* from Mar 2020 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019	Reviews Mar 2021 to Feb 2022		
	Number and percentage of reviews N=2,322* n (%)	Number and percentage of reviews of late miscarriages and stillbirths N=2,810 n (%)	Number and percentage of reviews of neonatal deaths N=1,389 n (%)	Number and percentage of all reviews N=4,199 n (%)
Policy, support and practical help to take their baby home was not available	542 (24%)	567 (20%)	350 (25%)	917 (22%)
Inadequate documentation regarding taking the baby home	413 (18%)	394 (14%)	172 (12%)	566 (13%)
Inadequate documentation regarding access to a cold cot	237 (10%)	147 (5%)	174 (13%)	321 (8%)
Inadequate documentation regarding transfer to mortuary care	187 (8%)	161 (6%)	145 (10%)	306 (7%)
Location and quality of the bereavement suite inadequate	207 (9%)	162 (6%)	105 (8%)	267 (6%)
Inadequate documentation to tell if bereavement care respected cultural, religious and spiritual wishes of the parents	134 (6%)	126 (4%)	102 (7%)	228 (5%)
Bereavement care adversely affected by service modifications due to the pandemic	--	163 (6%)	55 (4%)	218 (5%)
Inadequate documentation to tell if bereavement care provided included practical help and/or emotional support	95 (4%)	79 (3%)	90 (6%)	169 (4%)
Inadequate documentation to assess the location and quality of the bereavement care		48 (2%)	101 (7%)	149 (4%)
Poor quality of the bereavement care offered	64 (3%)	47 (2%)	71 (5%)	118 (3%)
Inadequate documentation to tell if a named contact for questions after bereavement was identified	69 (3%)	43 (2%)	40 (3%)	83 (2%)
Bereavement checklist was not included in the notes	51 (3%)	44 (2%)	66 (5%)	110 (3%)
Parents not offered the use of a cold cot	36	24 (1%)	44 (3%)	68 (2%)
Other**	135	183 (6%)	131 (9%)	314 (7%)

*These questions were incorporated into the PMRT in August 2020

**A total of 8 other issues which affected less than 40 individual reviews

Table 3.8: The most common issues identified with bereavement care* from Mar 2020 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019 Number and percentage of reviews N=2,322* n (%)	Reviews Jan 2021 to Feb 2022 Number and percentage of all reviews N=4,199 n (%)
Services changes which affected smoking assessment and management of exposure to tobacco		2,440 (58%)
The pandemic affected how women accessed maternity care	114 (5%)	141 (3%)
Bereavement care adversely affected by service modifications due to the pandemic	90 (4%)	89 (2%)
Questions about domestic abuse not asked due to remote delivery of booking care	63 (3%)	102 (2%)
The opportunity to take their baby home after death was not available	44 (2%)	58 (1%)
Location and quality of the bereavement care adversely affected by the pandemic	34 (2%)	36 (1%)
Serial scans for high risk of fetal growth restriction not available due to changes to service provision	17 (1%)	29 (1%)
Standard and further postnatal investigations were indicated but not offered	15 (1%)	22 (1%)

*These questions were incorporated into the PMRT in August 2020

Table 4.1: Grading of care during pregnancy care, labour and birth for late miscarriages & stillbirths, for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2021 to Feb 2022 with external**	
	Number of reviews N = 1,154	Percentage of reviews*	Number of reviews N = 2,607	Percentage of reviews*	Number of reviews N = 2,600	Percentage of reviews*	Number of reviews N = 2,810	Percentage of reviews*	Number of reviews N = 938	Percentage of reviews*
A – No issues with care identified	710	62%	1,496	57%	1,434	55%	1,400	50%	435	46%
B - Care issues that would have made no difference to the outcome	291	25%	705	27%	721	28%	867	31%	322	34%
C - Care issues which may have made a difference to the outcome	114	10%	329	13%	357	14%	394	14%	135	14%
D - Care issues which were likely to have made a difference to the outcome	30	3%	72	3%	83	3%	124	4%	45	5%
Unrecorded	9	1%	5	<1%	5	<1%	25	1%	1	<1%

*Rounding errors may result in percentages totalling 99% or 101%

** These are reviews where an external member is present as part of the review team

Table 4.2: Grading of care during pregnancy, labour and birth for neonatal deaths, for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2021 to Feb 2022 with external**	
	Number of reviews N = 346	Percentage of reviews*	Number of reviews N = 1,086	Percentage of reviews*	Number of reviews N = 1,381	Percentage of reviews*	Number of reviews N = 1,389	Percentage of reviews*	Number of reviews N = 478	Percentage of reviews*
A – No issues with care identified	214	62%	678	62%	751	54%	713	51%	237	50%
B - Care issues that would have made no difference to the outcome	102	29%	278	26%	406	29%	445	32%	162	34%
C - Care issues which may have made a difference to the outcome	20	6%	84	8%	111	8%	148	11%	64	13%
D - Care issues which were likely to have made a difference to the outcome	7	1%	18	2%	41	3%	37	3%	12	3%
Unrecorded	3	1%	28	3%	72	5%	46	3%	3	1%

*Rounding errors may result in percentages totalling 99% or 101%

**These are reviews where an external member is present as part of the review team

Table 4.3: Grading of care from birth to the death of the baby for neonatal deaths, for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2021 to Feb 2022 with external**	
	Number of reviews N = 346	Percentage of reviews*	Number of reviews N = 1,086	Percentage of reviews*	Number of reviews N = 1,381	Percentage of reviews*	Number of reviews N = 1,389	Percentage of reviews*	Number of reviews N = 478	Percentage of reviews*
A – No issues with care identified	237	68%	679	63%	852	62%	791	57%	276	58%
B - Care issues that would have made no difference to the outcome	92	27%	342	32%	446	32%	452	33%	156	33%
C - Care issues which may have made a difference to the outcome	11	3%	46	4%	68	5%	100	7%	41	9%
D - Care issues which were likely to have made a difference to the outcome	1	0%	8	1%	10	1%	7	<1%	1	<1%
Unrecorded	5	1%	11	1%	5	<1%	39	3%	4	1%

*Rounding errors may result in percentages totalling 99% or 101%

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Table 4.4: Most serious level of grading of care during pregnancy, labour, birth and during the neonatal period for neonatal deaths, for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2021 to Feb 2022 with external**	
	Number of reviews N = 346	Percentage of reviews*	Number of reviews N = 1,086	Percentage of reviews*	Number of reviews N = 1,381	Percentage of reviews*	Number of reviews N = 1,389	Percentage of reviews*	Number of reviews N = 478	Percentage of reviews*
A – No issues with care identified	159	46%	507	47%	582	42%	501	36%	167	35%
B - Care issues that would have made no difference to the outcome	147	42%	439	40%	586	42%	600	43%	205	43%
C - Care issues which may have made a difference to the outcome	26	7%	111	10%	161	12%	213	15%	91	19%
D - Care issues which were likely to have made a difference to the outcome	8	2%	24	2%	50	4%	42	3%	13	3%
Unrecorded	6	2%	5	<1%	2	<1%	33	2%	2	<1%

*Rounding errors may result in percentages totalling 99% or 101%

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Table 4.5: Grading of bereavement care following late miscarriage and stillbirth, for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2021 to Feb 2022 with external**	
	Number of reviews N = 1,154	Percentage of reviews*	Number of reviews N = 2,607	Percentage of reviews*	Number of reviews N = 2,600	Percentage of reviews*	Number of reviews N = 2,810	Percentage of reviews*	Number of reviews N = 938	Percentage of reviews*
A – No issues with care identified	955	83%	2,175	83%	2,072	80%	2,075	74%	655	70%
B - Care issues that would have made no difference to the outcome	141	12%	336	13%	427	16%	550	20%*	221	24%
C - Care issues which may have made a difference to the outcome	23	2%	70	3%	65	3%	126	5%	44	5%
D - Care issues which were likely to have made a difference to the outcome	8	1%	22	1%	34	1%	35	1%	17	2%
Unrecorded	27	2%	4	<1%	2	<1%	24	<1%	1	<1%

*Rounding errors may result in percentages totalling 99% or 101%

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Table 4.6: Grading of bereavement care following neonatal death, for the four time periods from Jan 2018 to Feb 2022

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2021 to Feb 2022 with external**	
	Number of reviews N = 346	Percentage of reviews*	Number of reviews N = 1,086	Percentage of reviews*	Number of reviews N = 1,381	Percentage of reviews*	Number of reviews N = 1,389	Percentage of reviews*	Number of reviews N = 478	Percentage of reviews*
A – No issues with care identified	312	90%	933	86%	1,147	83%	1,086	78%*	374	78%
B - Care issues that would have made no difference to the outcome	22	6%	94	9%	131	9%	219	16%*	72	15%
C - Care issues which may have made a difference to the outcome	5	1%	28	3%	30	2%	38	3%	26	5%
D - Care issues which were likely to have made a difference to the outcome	0	1%	21	2%	59	4%	3	<1%	3	1%
Unrecorded	7	2%	10	1%	14	1%	43	3%	3	1%

*Rounding errors may result in percentages totalling 99% or 101%

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